



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,644	05/18/2006	David A. Schleppenbach	9405-401-US-3	9356

43218 7590 02/23/2010
TAFT STETTINIUS & HOLLISTER LLP
ONE INDIANA SQUARE, SUITE 3500
INDIANAPOLIS, IN 46204

EXAMINER

SMITH, BENJAMIN J

ART UNIT	PAPER NUMBER
----------	--------------

2176

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

02/23/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

efspatents@sommerbarnard.com
EFSPatents@TaftLaw.com

Office Action Summary	Application No. 10/579,644	Applicant(s) SCHLEPPENBACH ET AL.	
	Examiner Benjamin J. Smith	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9,27,30-45 and 47-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9,27,30-45 and 47-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's Response

In Applicant's Response dated 11/18/2009, Applicant amended Claims 27, 30-32 and 47-50, canceled claim 46, added Claim 51, and argued against all objections and rejections previously set forth in the Office Action dated 8/19/2009.

Claims 1-9, 27, 30-45 and 47-51 remain pending for examination. Claims 1, 27, 31 and 32 are independent claims.

Based on the amendments to the Specification and cancellation of the claims, the objections to the Specification previously set forth are withdrawn.

Based on the amendments and cancellation of the claims, the objections to the claims previously set forth are withdrawn.

Based on the amendments and arguments, the prior art rejection of Claims 27, 30-42 and 47-50 under 35 U.S.C. 103 previously set forth is withdrawn. The prior art rejection of Claims 1-9 and 43-45 under 35 U.S.C. 103 previously set forth is maintained.

Claim Objections

Claim 50:

Claim 50 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 50 depends from Claim 32. Claim 50 recites "*channels step includes permitting access to at a sip-and-puff device*". Claim 32 recites "*providing a plurality of*

Art Unit: 2176

communication channels on the portable system by which the special needs person may interact with the portable system, the channels including at least one of a Braille keyboard and a sip-and-puff device”.

Although Claim 32 used the terminology "at least one of", using the broadest reasonable interpretation, if the device chosen in Claim 32 is the " *sip-and-puff device*" then Claim 50 fails to further limit Claim 32.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, rejected under 35 U.S.C. 103(a) as being unpatentable over Michael Kolfman US Patent No. 6,912,529 (hereinafter, "Kolfman"), and further in view of Schwerdtfeger et al. US Patent No. 6,725,424 (hereinafter, "Schwerdtfeger").

Claim 1:

Kolfman teaches:

A method of communicating content, said method comprising the steps of [abstract] [storing and retrieving documents]

converting the inputted content from the content group into an XML format to form converted content [col. 18, lines 5-35] [XML generator uses a DTD do convert to

Art Unit: 2176

convert files of multiple formats to XML] [col. 1, lines 50-65] [convert and view in Adobe Acrobat];

...;

outputting the converted content into a plurality of output devices [col. 20, lines 28-34] [produce formatted output for display]; *and ...*

Kolfman fails to teach:

applying a DOM tree to the content;

...

coordinating the plurality of output devices so that the plurality of the output devices delivers synchronized output

Schwerdtfeger teaches:

applying a DOM tree to the content [col. 3, line 62 through col. 4, line 8] [DOM generator];

coordinating the plurality of output devices so that the plurality of the output devices delivers synchronized output [col. 2, lines 4-16] [screen readers synchronize output, it should also be noted that every device that can play a DVD and output the sound delivers “synchronized output” because the video and sound are synchronized] [col. 3, lines 10-20] [output for multiple devices, including Braille display or speech engine].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of converting documents to XML in Kolfman with the method of creating a DOM tree in Schwerdtfeger.

This combination would have been useful for creating a document that can easily manipulated using the DOM.

Claim 2:

Schwerdtfeger teaches: *The method of claim 1, wherein at least one said output devices is configured for use by a special needs person.* [col. 3, lines 10-28] [Braille display or speech engine is for special needs person]

Claim 4:

Schwerdtfeger teaches: *The method of claim 1, further comprising a step of reading the DOM tree from data embedded in the inputted content* [col. 7, lines 48-65] [modified parts of the document are pre-transcoded in the DOM and saved for use in the DOM creation process].

Claim 5:

Schwerdtfeger teaches: *The method of claim 1, further comprising a step of scanning the inputted content to develop the DOM tree* [col. 3, line 62 through col. 4, line 8] [the inputted document would have to be scanned to produce an identifier for each element].

Art Unit: 2176

Claim 51:

Schwerdtfeger teaches: *The method of claim 1, wherein the plurality of the output devices delivers output synchronized for multiple simultaneous outputs* [col. 2, lines 4-16] [screen readers synchronize output in that the audio output is synchronized to the display output of the screen, it should also be noted that every device that can play a DVD and output the sound delivers “synchronized output” because the video and sound are synchronized] [col. 3, lines 10-20] [output for multiple devices, including Braille display or speech engine].

See examiner remarks below. Applicant's own specification says that the “multiple synchronized outputs” may be a monitor and speakers [Original specification: page 11, lines 1-12]

Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman and Schwerdtfeger as applied to claim 1 above, and further in view of Willian et al US Publication No. 2005/0021859 (hereinafter, “Willian”).

Claim 3:

Kolfman and Schwerdtfeger disclose all the elements of Claim 1, as noted in the above rejection.

Kolfman and Schwerdtfeger fail to teach:

The method of claim 1, wherein at least one said output devices is a test device usable for administering standardized tests.

Willian teaches:

The method of claim 1, wherein at least one said output devices is a test device usable for administering standardized tests [paragraphs 0005, 0028 and 0041]
[conversion of math or English tests for visually or hearing impaired].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of converting document to XML in Kolfman and the method of creating a DOM tree in Schwerdtfeger with the method of test administration in Willian.

This combination would have been useful for a better testing situation for a special needs person.

Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman and Schwerdtfeger as applied to claim 1 above, and further in view of Whitledge et al US Patent No. 6,925,595 (hereinafter, "Whitledge").

Claim 6:

Kolfman and Schwerdtfeger disclose all the elements of Claims 1 and 5, as noted in the above rejection:

Kolfman and Schwerdtfeger fail to teach:

The method of claim 5, wherein said scanning step includes a step of headings scanning in order to identify at least one of headings, subheadings, and chapters.

Whitledge teaches:

The method of claim 5, wherein said scanning step includes a step of headings scanning in order to identify at least one of headings, subheadings, and chapters [col. 25, lines 16-50 and fig. 11] [identifies each part].

Whitledge simply discloses the common way for arranging a DOM. Each DOM that is created scans the document to identify the different elements. These different elements are most commonly, headings, text, graphics, tables, row, columns, cells, titles, headings as well as other items.

Although Schwerdtfeger does not specifically mention these elements the identification of these elements would have been common to one having ordinary skill in the art at the time of the invention.

Claim 7-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman and Schwerdtfeger as applied to claim 1 above, and further in view of Decary et al US Patent No. 7,065,483 (hereinafter, "Decary").

Art Unit: 2176

Claim 7:

Kolfman and Schwerdtfeger disclose all the elements of Claim 1, as noted in the above rejection:

Kolfman and Schwerdtfeger fail to teach:

The method of claim 1, further comprising a step of parsing the inputted content into at least content pieces, the content pieces having a characteristic selected from a characteristic group comprising a paragraph, a phrase, a word, and a letter.

Decary teaches:

The method of claim 1, further comprising a step of parsing the inputted content into at least content pieces, the content pieces having a characteristic selected from a characteristic group comprising a paragraph, a phrase, a word, and a letter [col. 5, lines 14-23 and col. 9, lines 30-47] [extract parts of document and parts of speech, scanning each letter to identify noun phrase].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of converting document to XML in Kolfman and the method of creating a DOM tree in Schwerdtfeger with the method of speech part identification in Decary.

This combination would have been useful for identifying parts of a document that may need to be changed or altered for a special needs person.

Claim 8:

Schwerdtfeger teaches: *The method of claim 7, further comprising a step of analyzing the content pieces so as to assign an identifier to each of said content pieces* [col. 3, line 62 through col. 4. line 8] [generating a unique identifier for each element].

Claim 9:

Decary teaches: *The method of claim 8, wherein the identifier is at least one selected from an identifier group comprising a subject, a predicate, and an object* [col. 6, lines 55-65] [identify each part of speech, noun, subject, object, verb etc.].

Claim 43 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman, Schwerdtfeger and Decary as applied to Claims 7 and 9 above in view of Slotznick et al. US Patent Publication No. 2002/0178007 (hereinafter, "Slotznick").

Claim 43:

Schwerdtfeger, Kolfman and Decary disclose all the elements of Claim 7 as shown above.

Schwerdtfeger, Kolfman and Decary fail to teach:

The method of claim 7, further comprising a step of highlighting individual words.

Slotznick teaches:

The method of claim 7, further comprising a step of highlighting individual words.

[paragraphs 0006 and 0106] [word is highlighted as it is read].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Kolfman and the method of creating a screen reader toolbar in Schwerdtfeger and the method of parsing in Decary with the method of highlighting in Slotznick.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 44-45 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman, Schwerdtfeger and Decary as applied to Claims 7 and 9 above in view of Laurence LeCapelain US Patent No. 4,470,821 (hereinafter, "LeCapelain").

Claim 44:

Schwerdtfeger, Kolfman and Decary disclose all the elements of Claim 7 as shown above.

Schwerdtfeger, Kolfman and Decary fail to teach:

The method of claim 7, further comprising a step of color coding at least one of passages and words.

Art Unit: 2176

LeCapelain teaches:

The method of claim 7, further comprising a step of color coding at least one of passages and words [abstract and col. 2, lines 23-59] [color code parts of speech].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Kolfman and the method of creating a screen reader toolbar in Schwerdtfeger and the method of parsing in Decary with the method of highlighting and color coding in LeCapelain.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 45:

LeCapelain teaches: *The method of claim 9, further comprising a step of color coding at least one of a subject, a predicate, and an object of a sentence [abstract and col. 2, lines 23-59] [color code parts of speech].*

Claims 27, 30 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Michael Kolfman US Patent No. 6,912,529 (hereinafter, "Kolfman"), and further in view of Holm et al. US Patent No. 5,850,629 (hereinafter, "Holm").

Claim 27:

Kolfman teaches:

A method of communicating content to a special needs person, said method comprising the steps

of accepting content input [abstract] [storing and retrieving documents];

using a processor to convert said content input into a converted content,

[col. 18, lines 5-35] [XML generator uses a DTD do convert to convert files of multiple formats to XML] [col. 1, lines 50-65] [convert and view in Adobe Acrobat];

...;

modifying output to the person based upon a selected configuration [col. 20, lines 28-34] [produce formatted output for display].

Kolfman fails to teach:

providing a computerized output configuration toolbar to the special needs person;

enabling the person to use the toolbar to modify an existing third-party software application; and

Holm teaches:

providing a computerized output configuration toolbar to the person [col. 5 lines 20-28 and fig. 4] [a slider to change the reading rate];

enabling the person to use the toolbar to modify an existing third-party software application; and [col. 5 lines 20-28 and fig. 4] [toolbar is used on top of MICROSOFT EXCEL or WORDPERFECT]

Holm also teaches “*said content input into a converted content*” [in that the displayed content is converted to speech]

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of converting documents to XML in Kolfman with the method of creating a screen reader toolbar in Holm.

This combination would have been useful for creating a document that can easily manipulated using the screen reader.

Claim 30:

Holm teaches: *The method of claim 27, wherein the special needs person can modify voice selection* [col. 9, lines 8-10 and col. 7, lines 1-3] [select voice].

Claim 34:

Holm teaches: *The method of claim 27, comprising the further step of enabling the special needs person to use the toolbar to change a reading rate at which speech is generated* [col. 5 lines 20-28 and fig. 4] [a slider to change the reading rate].

Claim 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman and Holm as applied to Claim 27 above in view of Bravin et al. US Patent No. 7,333,507 (hereinafter, “Bravin”).

Claim 33:

Holm and Kolfman disclose all the elements of Claim 27 as shown above.

Holm and Kolfman fail to teach:

The method of claim 27, comprising the further step of providing a computerized avatar to facilitate communicating of the content.

Bravin teaches:

The method of claim 27, comprising the further step of providing a computerized avatar to facilitate communicating of the content [abstract] [col. 6, lines 22-33] [sign language generator and avatar].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Kolfman and the method of creating a screen reader toolbar in Holm with the method of on screen avatars in Bravin.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman and Holm as applied to Claim 27 above in view of Willian et al US Patent Publication No. 2005/0021859 (hereinafter, "Willian").

Art Unit: 2176

Claim 35:

Holm and Kolfman disclose all the elements of Claim 27 as shown above.

Holm and Kolfman fail to teach:

The method of claim 27, comprising the further steps of: loading a test onto a portable system; providing a plurality of communication channels on the portable system by which the person may interact with the portable system; and recording responses from said individual communicated via at least one of said channels.

Willian teaches:

The method of claim 27, comprising the further steps of:

loading a test onto a portable system [paragraph 005] [test for hearing or visually impaired] [paragraph 0020 and 0022] [retrieving from server and distribute to wireless computer, a wireless computer is portable];

providing a plurality of communication channels on the portable system by which the person may interact with the portable system [paragraph 0023] [monitor, speakers, printer, keyboard, mouse and microphone]; and

recording responses from said individual communicated via at least one of said channels [paragraph 0048] [the input devices are record responses including IVR].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Kolfman and the method of creating a screen reader toolbar in Holm with the method of test conversion in Willian.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 41 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman, Schwerdtfeger and Willian as applied to Claim 35 above in view of Schwerdtfeger et al. US Patent No. 6,725,424 (hereinafter, "Schwerdtfeger").

Claim 41:

Holm, Kolfman and Willian disclose all the elements of Claim 35 as shown above.

Holm, Kolfman and Willian fail to teach:

The method of claim 35, wherein the providing of channels step includes permitting access to at least one of an access group comprising a Braille keyboard and a sip-and-puff device

Schwerdtfeger teaches: *The method of claim 35, wherein the providing of channels step includes permitting access to at least one of an access group comprising a Braille keyboard and a sip-and-puff device* [col. 3, lines 10-29] [Braille display used for presenting information to a user] [Sip and Puff: This device allows a user to control the

Art Unit: 2176

cursor with sips or puffs of air on a mouth tube and can be used by a system that has a cursor].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Kolfman and the method of creating a screen reader toolbar in Holm with the method of test conversion in Willian and the use of a sip and puff device in Schwerdtfeger.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 42:

Kolfman teaches: *The method of claim 35, further comprising a step of converting the testing content to XML format* [col. 18, lines 5-35] [XML generator uses a DTD do convert to convert files of multiple formats to XML].

Claim 36-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Kolfman, Holm and Willian as applied to Claim 35 above in view of Thomas R. Doty JR US Patent Publication No. 2003/0152904 (hereinafter, "Doty").

Claim 36:

Schwerdtfeger, Kolfman and Willian disclose all the elements of Claim 35 as shown above.

Holm, Kolfman and Willian fail to teach:

The method of claim 35, comprising the further step of using the processor to time portions of the test.

Doty teaches:

The method of claim 35, comprising the further step of using the processor to time portions of the test [paragraphs 0034 and 0113, 0174] [control response time would require the test to be timed, and adding question times, input response times and time outs].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Kolfman and the method of creating a screen reader toolbar in Holm with the method of test conversion in Willian and the method of test proctoring in Doty.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 37:

Doty teaches: *The method of claim 35, comprising the further step of using the processor to prevent the person from returning to a portion of the test* [paragraph 0117]

Art Unit: 2176

[start and stop progress of test] [this element was also well know in the art at the time of the invention and a normal part of computerized test taking at the time of the invention].

Claim 38:

Doty teaches: *The method of claim 35, comprising the further step of using the processor to enable a proctor to add additional time for taking the test* [paragraphs 0034 and 0113, 0174] [control response time would require the test to be timed, and adding question times, input response times and time outs].

Claim 39:

Doty teaches: *The method of claim 35, comprising the further step of using the processor to enable a proctor to cancel a portion of the test* [paragraph 0117] [start and stop progress of test] [this element was also well know in the art at the time of the invention and a normal part of computerized test taking at the time of the invention].

Claim 40:

Doty teaches: *The method of claim 35, further comprising the step of delivering the portable system to a site at which testing content may be used.*

[paragraph 0009] [deliver courseware to learners, delivery devices include computers which are portable systems].

Claim 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Schwerdtfeger et al. US Patent No. 6,725,424 (hereinafter, "Schwerdtfeger") in view of Bravin et al. US Patent No. 7,333,507 (hereinafter, "Bravin")

Claim 31:

Schwerdtfeger discloses: *A method of communicating content to a special needs person* [abstract], *said method comprising the steps of:*

accepting content input [col. 2, lines 17-27] [user input];

using a processor to convert said content input into a converted content [col. 7, lines 17-30] [text to speech converter];

providing a computerized output configuration toolbar to the special needs person [col. 10, lines 13-29] [screen readers, the interface has buttons for reading controls, these buttons are part of a "toolbar", It should also be noted that screen readers were common in the art at the time of the invention and screen readers have a toolbars that "modify an existing third-party software"];

modifying output to the person based upon a selected configuration [col. 4, lines 35-55] [modifying output based on the assistive technology device that is connected];
and ...

wherein the plurality of the output devices delivers output synchronized for multiple simultaneous outputs [col. 2, lines 4-16] [screen readers synchronize output in that the audio output is synchronized to the display output of the screen, it should also be noted that every device that can play a DVD and output the sound delivers

Art Unit: 2176

“synchronized output” because the video and sound are synchronized] [col. 3, lines 10-20] [output for multiple devices, including Braille display or speech engine].

See examiner remarks below. Applicant's own specification says that the “multiple synchronized outputs” may be a monitor and speakers [Original specification: page 11, lines 1-12]

Schwerdtfeger fails to teach:

providing a computerized avatar to facilitate communicating of the content.

Bravin teaches:

providing a computerized avatar to facilitate communicating of the content

[abstract] [col. 6, lines 22-33] [sign language generator and avatar].

In addition to Schwerdtfeger, Bravin also discloses: *modifying output to the person based upon a selected configuration* [col. 5, lines 1-19] [communication channel depends on the selected user devices and input/output methods and ways of communication]

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of creating a screen reader toolbar in Schwerdtfeger with the method of on screen avatars in Bravin.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Holm et al. US Patent No. 5,850,629 (hereinafter, "Holm") in view of Schwerdtfeger et al. US Patent No. 6,725,424 (hereinafter, "Schwerdtfeger") and further in view of Willian et al US Patent Publication No. 2005/0021859 (hereinafter, "Willian")..

Claim 32:

Holm teaches:

A method of communicating content to a special needs person, said method comprising the steps of: accepting content input; [abstract] [text to speech]

using a processor to convert said content input into a converted content [col. 4, lines 57-68] [converting text to speech, in this case the converted content is the speech];

providing a computerized output configuration toolbar to the special needs person [col. 5 lines 20-28 and fig. 4] [toolbar is used on top of MICROSOFT EXCEL or WORDPERFECT];

enabling the person to use the toolbar to change a reading rate at which speech is generated [col. 5 lines 20-28 and fig. 4] [a slider to change the reading rate];

modifying output to the special needs person based upon a selected configuration [col. 5 lines 20-28 and fig. 4] [a slider to change the reading rate is modifying the output];

...

Holm fails to teach:

loading a test onto a portable system;

providing a plurality of communication channels on the portable system by which the person may interact with the portable system, the channels including at least one of an a Braille keyboard and a sip-and-puff device; and

recording responses from said special needs person communicated via at least one of said channels.

Schwerdtfeger teaches:

the channels including at least one of an a Braille keyboard and a sip-and-puff device [col. 3, lines 10-29] [Braille display used for presenting information to a user] [Sip and Puff: This device allows a user to control the cursor with sips or puffs of air on a mouth tube and can be used by a system that has a cursor].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of converting text to speech in Holm with the method of using devices for special needs people in Schwerdtfeger.

This combination would have been useful for creating a document that can easily manipulated using the screen reader.

Schwerdtfeger and Kolfman fail to teach:

loading a test onto a portable system;

providing a plurality of communication channels on the portable system by which the person may interact with the portable system, ...; and

recording responses from said special needs person communicated via at least one of said channels.

Willian teaches:

loading a test onto a portable system [paragraph 005] [test for hearing or visually impaired] [paragraph 0020 and 0022] [retrieving from server and distribute to wireless computer, a wireless computer is portable];

providing a plurality of communication channels on the portable system by which the person may interact with the portable system [paragraph 0023] [monitor, speakers, printer, keyboard, mouse and microphone]; *and*

recording responses from said special needs person communicated via at least one of said channels [paragraph 0048] [the input devices are record responses including IVR].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Holm and the method of using special needs devices in Schwerdtfeger with the method of text conversion in Willian.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 50:

Schwerdtfeger teaches: *The method of claim 46, wherein the providing of channels step includes permitting access to at least one of an access group comprising a Braille keyboard and a sip-and-puff device* [col. 3, lines 10-29] [Braille display used for presenting information to a user] [Sip and Puff: This device allows a user to control the cursor with sips or puffs of air on a mouth tube and can be used by a system that has a cursor].

Claim 47-49 rejected under 35 U.S.C. 103(a) as being unpatentable over Holm, Schwerdtfeger and Willian as applied to Claim 46 above in view of Thomas R. Doty JR US Patent Publication No. 2003/0152904 (hereinafter, "Doty").

Claim 47:

Holm, Kolfman and Willian disclose all the elements of Claim 46 as shown above.

Schwerdtfeger, Holm and Willian fail to teach:

The method of claim 46, comprising the further step of using the processor to time portions of the test.

Doty teaches:

The method of claim 46, comprising the further step of using the processor to time portions of the test [paragraphs 0034 and 0113, 0174] [control response time would require the test to be timed, and adding question times, input response times and time outs].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the conversion method in Kolfman and the method of creating a screen reader toolbar in Schwerdtfeger with the method of test conversion in Willian and the method of test proctoring in Doty.

This combination would have been useful for creating a content that can easily used by a special needs person.

Claim 48:

Doty teaches: *The method of claim 46, comprising the further step of using the processor to prevent the person from returning to a portion of the test* [paragraph 0117] [start and stop progress of test] [this element was also well know in the art at the time of the invention and a normal part of computerized test taking at the time of the invention].

Claim 49:

Doty teaches: *The method of claim 46, comprising the further step of using the processor to enable a proctor to add additional time for taking the test* [paragraphs 0034 and 0113, 0174] [control response time would require the test to be timed, and adding question times, input response times and time outs].

Response to Arguments

Applicant's arguments with respect to claim 27, 30-42 and 47-50 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the prior art cited does not disclose "output synchronized for multiple simultaneous outputs"

The examiner disagrees.

Most if not all computers synchronize output to multiple devices using multiple outputs at the same time. This is accomplished through the synchronizing of the audio and visual output, usually by displaying video on the screen and playing audio on the speakers. These two devices monitor and speakers are "multiple outputs at the same time".

In addition to this Schwerdtfeger also discloses the ability to synchronize output to other devices as well such as a brail keyboard. In this case the multiple devices are the speakers and Braille keyboard, or monitor and Braille keyboard [col. 2, lines 4-16] [screen readers synchronize output in that the audio output is synchronized to the

Art Unit: 2176

display output of the screen, it should also be noted that every device that can play a DVD and output the sound delivers "synchronized output" because the video and sound are synchronized] [col. 3, lines 10-20] [output for multiple devices, including Braille display or speech engine].

Further, in the applicant's own specification describes the "synchronizing" of outputs as including speakers and a monitor [page 11, lines 12].

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin J. Smith whose telephone number is (571)

Art Unit: 2176

270-3825. The examiner can normally be reached on Monday through Friday 8:30AM-5:00PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin J. Smith/
Examiner, Art Unit 2176

/DOUG HUTTON/
Supervisory Patent Examiner, Art Unit 2176